

Panukala Blg.
NSDB-GAUF 7706 Spi

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4ETA-PLPA SA KATAWAGAN PARA SA
3 AGHIMUAN SA KABUKIRAN

(ARANETA-NSDB Terminology Program for Technology Transfer
to Rural Areas)

Blg. 1

SINALAPAT NA SIPNAYAN (Applied Mathematics)

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BUNGADSABI

Ang Palagawaang Araneta-PLPA sa Katawagan para sa Salipat ng Aghimuan sa Kabukiran ay isang palagawaan ng sabalak-wika na tinutustusan ng PLPA (Pambansang Lupon sa Paunlarang Agham) sa ilalim ng Panukala Blg. NSDB-GAUF 7706 Spi. Bilang panimulang hakbang ito ay nagtipon ng siyam (9) na batayan at magkakaugnay na may 1000-pasok na talasalitaan ng mga tawag at pahayag sa Aghimuing Pilipino, na ihinanda ayon sa pamamaraang maugnayin, sa mga sumusunod na sinatanging aghimuaning larangan:

1. Sinalapat na Sipnayan
2. Sinalapat na Agham
3. Sabalak-Angkan
4. Sakahan
5. Sakahaning Agsikapan
6. Palahayupan
7. Palagamutang-Hayop
8. Palagubatan
9. Pamahayagan at Salathala

Lahat ng mga nangaunang talasalitaan sa Pilipino, pati na yaong sa maugnaying Pilipino na ihinanda ng Lupon sa Agham, ay naglalaman ng halos lahatang tawag at pahayag lamang sa agham; walang isa man na nagbibigay ng tiyak at maayos na mga salitang-pasok tulad ng makikita sa siyam na talasalitaang ihinanda ngayon ng Palagawaang ito. Ang siyam na talasalitaan ay panungkulaning sinatungo at maaaring gamitin sa paghahanda ng sapat na mga aklat-aralan para sa lahat ng aghimuing kaaralan sa dalubhasaan na ibinibigay sa **Takaran ng Pamantasang Gregorio Araneta** gayundin para sa mga katulad na kaaralan sa ibang mga dalubhasaan at pamantasan.

Ang Sabalak-Angkan ay hindi pangunahing panta-laaralang larangan ngunit isinama ito bilang hiwalay na panukala dahil sa napapanahon at dahil sa ang pagkamabisa ng maugnaying Pilipino ay unang naipakilala sa larangang ito.

Sa lahatang ayos ng Palagawaan, ang bawat isa sa siyam na guro ng Kagawaran ng Aghimuing Pilipino ng Pamantasan na may kasanayan at may karanasan ay nakipagtulungan sa isang may kakayahan at karanasang guro ng bawat aghimuanin o pang-agham na dalubhasaan ng TPGA. Ang bawat ganyang koponan ay nagtipon, nagsuri ng kahulugan, nagsapamantayan at sumubok sa mga tawag at pahayag ng kaukulang larangan ng koponan.

Ang gawain ay sinimulan noong Pebrero 16, 1978 at natapos noong Hulyo 15, 1978.

Ang mga manunungkulan at manunupad ay duma-raing sa kakulangan ng mga aklat at ibang lathalaing nakasulat sa aghimuing Pilipino. Ito ay dahil sa kakulangan ng maayos at makatwirang talasalitaan sa iba't ibang aghimuaning larangan. Sa ngayon, wala pang pampaturuang tatagin, maliban sa Takaran ng Pamantasang Gregorio Araneta, na nakapaglakip ng kadalubhasaan sa wika at sa aghimuan at humarap upang tustusan ang mahalgang pangangailangang ito. Ang iba ay naniniwala na ang mga aghimuing sansalitaan ay likas na sisipot sa kaukulang panahon. Maaaring gayon nga sa katagalan, ngunit ang haba ng kakailanganing panahon ay magiging dikatanggap-tanggap; ito ay maaaring masukat sa mga dantaon sa halip na sa mga pampaaralang hatintaon.

Gumagamit ang Pamamaraang Maignayin sa mga hangong salita batay sa mga salitang-ugat, panlapi, panambal at palabuuan na dati nang alam, o madaling maipaliliwanag, sa lakastao sa kabukiran ng bansang ito na may matibay na sanligan ng wikang Sampuluanin o Malayo-Polinesiko. Ang maugnaying pamamaraan ay salungat sa walang-taros na paggamit ng mga salitang hiram, lalo na yaong naghahalo ng maraming panambal na Griyego at Latin na hindi madaling maipaliwanag sa di-katutubong nagsasalita ng mga wikang Yurophin. Gayunman, ang mga aghaming ngalan ng mga halaman at hayop (hbw. *Terminalia catappa* para sa punong talisay) ay mananatili upang hindi magambala ang kasiyangaan.

Inaasahan na mula ngayon ang mga tapos sa Sakahan at mga kaugnay na kaaralan, na gumamit ng mga

aklat-aralan na nakasulat sa aghimuing Pilipino, na ihinanda ayon sa Pamamaraang Manguayin, tulad ng ipinaliwanag sa itaas, ay makakatuklas na maaaring ilipat ang aghimuan sa lakaslaos sa mga kabukiran.

May apat na katangian ang siyam na talasalitaan ng Palagawaang ito na magpapagaan sa kanilang salagom sa kabuuan ng mga katawagang manguayin.

Una, sila ay manguayin sa mga salitang nakapasok na sa "Manguaying Talasalitaang Pang-agham, Ingles-Pilipino" na ilinalathala ng Lupon sa Agham na itinataguyod ng UNESCO noong 1969. Nagtataglay ng mga 7,500 salita, tawag at pahayag ang lahatang talasalitaang pang-agham na ito.

Pangalawa, ang unang 350 mga salitang-pasok sa bawat isa ng siyam na muntaklat ay magkakaisa, upang mabigyan ang lahat ng siyam na panungkulaning larangan ng magkatulad na butod ng mga batayang tawag na pang-agham.

Pangatlo, sa 350 salitang-pasok, 200 ang mga "salitang susi" na sa Pamamaraang Manguayin ay kailangang ituro sa lahat ng mga bata sa mababang paaralan sa una at ikalawang baitang. Kasama rito ang mga batayang dalumat tulad ng bilang (number), dami (quantity), haba (length), atb. Maraming mga tawag ang napasama sa mga "salitang susi" hindi lamang sa kanilang kahulugan kundi sa dahilang sila ay maliwanag na naglalarawan ng mga tiyak na pamamaraan ng palabuuan ng salita sa Pilipino. Sa pagsasanay sa mga salitang yaon sa mga murang gulang, lagi nang matatanim sa isip ng mga mag-aaral sa mababang paaralan ang mga kaukulang palabuuan ng mga salita.

Pang-apat, lahat ng siyam na talasalitaan ay manguayin sa may humigit-kumulang na 30,000 manguaying tawag at tumpak na paggamit na nakapanid sa LUNSAG (Lunduyang Simpanan ng mga Salitang Agham), mga talaturuang panid na sinisimpan ng Kagawaran ng Aghimuing Pilipino ng pamantasang ito.

Ang isip ng tao ay mabilis na natututo, nakapanganatwiran nang mabuti at nakapag-iisip nang lalong malikhaing kapag maraming landas ng pagkakaugnayan sa mga salita, tawag at pahayag ng wikang ginagamit. Sagitan ng hakbang na ito sa Palagawaang Araneta-PLPA sa Katawagan para sa Salipat ng Aghimuan sa Kabukiran, umaasa kami na nakasulong kami nang malaki tungo sa malawak na saunlad ng agham at aghimuan sa bansang ito.

GONSALO DEL ROSARIO
Pamuno ng Panukala

Hulyo 15, 1978

P R E F A C E

The Araneta-NSDB Terminology Program for Technology Transfer to Rural Areas is a language planning program financially assisted by the NSDB (National Science Development Board) under its Project No. NSDB-GAUF 7706 Spl. It is designed to compile, as an initial step, nine (9) basic and interrelated 1000-entry vocabularies or word lists of technical Pilipino terms and expressions, structured according to the Manguyayin Approach, in the following specific technological areas:

1. Applied Mathematics
2. Applied Sciences
3. Family Planning
4. Agriculture
5. Agricultural Engineering
6. Animal Husbandry
7. Veterinary Medicine
8. Forestry
9. Journalism and Publishing

All previous word lists or vocabularies in Pilipino, including those in Manguyayin Pilipino published by the Lupon sa Agham, a Pilipino translation committee sponsored by the UNESCO National Commission of the Philippines in 1965, contained mostly general terms and expressions in the pure sciences; there was none offering specific, rigorous and systematic entries like those found in the nine vocabularies compiled under this Program. These nine word lists are profession-oriented and would make possible the preparation of adequate textbooks for all the collegiate technological courses offered in the Gregorio Araneta University Foundation as well as for similar courses in other colleges and universities.

Family Planning is not a main curricular area but it has been included as a separate project of the Program because of its relevance today and because the effectiveness of Manguyayin Pilipino was first demonstrated in this field.

The general plan of the Program was for each of nine qualified and experienced faculty members of the University's Department of Technical Pilipino to team up with one qualified and experienced faculty member in

each of the technological or science institutes of GAUF. Each team thus formed then collected, semantically analysed, standardized and tested terms and expressions in the team's particular field. The nine technological vocabularies thus produced have been published as convenient booklets each 9 inches wide, 7.5 inches long and of about 50 pages.

The work was started on February 16, 1978 and was completed on July 15, 1978.

Professionals and practitioners have decried the lack of books and other publications written in technical Pilipino, and this was due to the lack of systematic and authoritative vocabularies in the different technological fields. So far, no educational institution aside from the Gregorio Araneta University Foundation has combined language expertise with technology and come forward to supply this important need. Some of the others prefer to believe that technical vocabularies will spontaneously evolve in due time. This may be so in the long run, but the time frame involved would be unacceptably long; it may be measured in centuries instead of in school semesters.

The Mognayin Approach utilizes word derivations based on root words, affixes, combining forms and word formation that are already known, or may be easily explained, to rural manpower in this country which has a strong Malayo-Polynesian language background. The Mognayin Approach frowns upon the indiscriminate use of foreign loanwords, especially those incorporating many Greek and Latin combining forms that are not easy to explain to those who are not native speakers of European languages. However, the scientific names of plants and animals (ex. *Terminalia catappa* for the talisay tree) will be retained in order not to disturb identification.

It is hoped that college graduates who will henceforth study the agricultural and related courses using textbooks written in technical Pilipino, prepared according to the Mognayin Approach as described above, would find it possible to transfer technology to manpower in the rural areas.

There are four characteristics of the nine vocabularies or word lists developed in this Program which will

facilitate their integration into the whole body of maugnayin terminology.

First, they are all consistent and interrelated with the entries in the "Maugnaying Talasalitaang Pang-Agham, Ingles-Pilipino" published by the UNESCO-sponsored Lupon sa Agham in 1969. This general science vocabulary contains some 7,500 words, terms and expressions.

Second, the first 350 entries of each of the nine booklets are identical in order to provide all nine professional areas with the same core or nucleus of fundamental science terms.

Third, of the 350 entries, 200 are the "Key Words" which, in the Maugnayin Approach, must be taught to all elementary school children in their first and second grades. They include such very basic concepts as number (bilang), quantity (dami), length (haba), etc. Many terms have been included among the "Key Words" not primarily because of their meanings but because they clearly illustrate distinct methods of word formation. By mastering such words at an early age, elementary school children will indelibly internalize in their minds the corresponding word morphologies.

Fourth, all the nine vocabularies are consistent with the approximately 30,000 maugnayin terms and actual usages catalogued in the LUNSAG (Lunduyang Simpanan ng mga Salitang-Agham) or **Central Repository of Science Words**, a card file being maintained and continually updated by the Department of Technical Pilipino of this University.

The human mind learns faster, reasons better and thinks more creatively when there are many pathways of interrelatedness between and among the words, terms and expressions of the language used. With this step in the **Araneta-NSDB Terminology Program for Technology Transfer to Rural Areas**, we hope to have taken a giant stride on the road towards the intensive development of science and technology in this country.

GONSALO DEL ROSARIO
Project Leader

July 15, 1978

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A. MGA KARANIWANG SALITANG PANG-AGHAM (Common Science Words)

1. abstract	basal
2. academic	pantalisikan
3. action	gawa, bilos
4. activity	kabilusan
5. address	padalahan
6. adviser	tagapayo
7. again	muli
8. agenda	tikmaan
9. airman	manlilipad
10. album	tipunan
11. always	lagi
12. amount	daghan
13. analogy	palasurian
14. analysis	suri
15. announcement	pabatid
16. arc	bantok
17. area (in general)	lawak
18. area (specified)	dawak
19. around	palibot
20. arrangement	ayos
21. artificial	gawa-gawa
22. assistant	kawaksi
23. atmosphere	kaanginan
24. attendance	sadalo
25. autobiography	sarilitalambuhay
26. average	balasak
27. axis	taluhog
28. base	takad
29. big, great, grand	malaki, dako
30. bilingual	dalwikain
31. biology	haynayan
32. body (inorganic)	lawas (Hig.)
33. booklet	muntaklat
34. bulletin board	paskilan
35. by means of	sagitan ng
36. campus	kampusan
37. candidate	halangad
38. canteen	manganan (Kpn.)
39. capacity	lulan

40. car	batlag
41. cash (money on hand)	salaping-hawak
42. cashier	ingatsalapi
43. center	lunduyan
44. ceremony	galian
45. certain	tiyak
46. change	baylo (Bis.)
47. chaplain	kapelyan
48. chart	taltaguhit
49. chemistry	kapnayan
50. circular letter	palibot-sulat
51. civilization	kabihasaan
52. clearance	hisagutin
53. clinic	gamutan
54. closed	pinid
55. coldness	lamig
56. cold season	taglamig
57. college, institute	dalubhasaan
58. committee	lupon
59. communication	talamitam
60. companion	abay
61. complete	ganap
62. composite	lakip
63. compute	tuos
64. concavity	lukong
65. concept	dalumat
66. condense	kintay
67. conscious mind	malay
68. consistently interrelated	maugnayin
69. consultant	kasangguni
70. convexity	lukob
71. copyright	karapatang-akda
72. correct	wasto
73. create	likha
74. creative	malikhain
75. cultural	pangkalinangan
76. culture	kalinangan
77. curved	kilo
78. cylinder	bumbong
79. cylindrical	binumbong
80. date	taburaw
81. dean	dalubpuno
82. decrease	bawas

83. definition	katuringan
84. delivery	hatid
85. dense	siksik
86. design	antang (Mar.)
87. development	saunlad
88. deviation	lihís
89. dictionary	talatinigan
90. digestion	satunaw
91. direction	tungo
92. director	patnugot
93. directory (gen.)	talahanapan
94. disconnection	tanggal
95. distance	agwat
96. doctor (Ph.D.)	pantas
97. dormitory	panuluyan
98. draft	waki
99. duration	lawig
100. earth	duta (Bis.)
101. edge	gilid
102. education (as a system)	paturuan
103. effect	bisa
104. electricity	dagitab
105. elevator	sigtas
106. emeritus	higitlingkod
107. employee	kawani
108. encyclopedia	santalaalaman
109. endorsement	satukoy
110. energy	kusog (Bis.)
111. engineer	agsikap
112. environment	kapaligiran
113. epic	darangan (Mar.)
114. erase	payi
115. escalator	sigdan
116. estimate	taya
117. ethics	palaasalan
118. evaluation form	talahalgahan
119. even (Math.)	tukol
120. exact	singkad
121. excess	labaw (Hlg.) labis
122. exercise (physical)	sabanat
123. experiment	titaw (Bis.)
124. extreme	sukdulan
125. facilities	kaluwagan

126. faculty (Ed.)	kaguruan
127. family	angkan
128. fee	bayad
129. field	larang
130. figure	laraw
131. filing cabinet	salansanan
132. firmness	katatagan
133. flight	lipad
134. focus	tingob (Hlg.)
135. folder	ipitan
136. force	isig (Mat. Tag.)
137. form	anyo, anyuan
138. formal	maanyo
139. foundation	takaran
140. gather together	lagom
141. general	lahatan
142. glossary	talahulugan
143. graduate school	dalubhasikan
144. grain	butil
145. grandstand	dakmasiran
146. granular	malabutil
147. gravity	dagsin (Hk.)
148. group	lipon
149. hall	bulwagan
150. hidden	kubli
151. husband	bana (Bis.)
152. hymn	santinig
153. idea	kaisipan
154. identification (I.D.)	pangilala
155. imperfect (Math.)	ballag
156. imperfect (gen.)	di-himpit
157. increase	dagdag
158. increase of speed	dasig (Bis., Bkl.)
159. indigestion	di-satunaw
160. indirect measurement	sukod
161. infra— (comb. form)	sulud— (Bis.)
162. instant	dagli
163. intention	sadya
164. intermission	panalingit
165. invocation	panawagan
166. involvement	sadawit
167. irrigation	patubig
168. jargon	wiwika

169. jeopardy	sanganib
170. Junior (Jr.)	Anak (Ak.)
171. justice	katarungan
172. juvenile	kabataan
173. kilogram	libogramo
174. kilometer	libometro
175. kin	hinlog, kaanak
176. kind	uri
177. leader	pamuno
178. lecture	panayam
179. lesson	aral
180. life	buhay
181. light (optics)	suga (Hlg.)
182. limit	takda
183. lobby	lisawon
184. log book (attendance)	taladaluhan
185. lore	alaman
186. major (Ed.)	kalakhan
187. majority	karamihan
188. masses	santao
189. master (degree)	paham
190. mathematics	sipnayan
191. measuring scale	sukatan
192. memorandum	paandam
193. messenger	tagahatid
194. Metro-Manila	Dak-Maynila
195. microphone	miktinig
196. middle	gitna
197. mimeograph	limwad
198. mind	isip
199. minor (Ed.)	kalit-an
200. minor (Gen.)	maliit
201. minutes (of a meeting)	katitikan
202. more than	higit sa
203. motion	kilos
204. movement	kilusan
205. multiple	lambal
206. name (Ling.)	ngalan
207. narrate	saysay
208. natural	likas
209. nerve	dagandam
210. next	sunod
211. none (zero)	awan (Ilk.)

212. notebook	aklat-talaan
213. novel	kathambuhay
214. nucleus	butod
215. number	bilang
216. observation	masid
217. obstacle	hadlang
218. odd (Math.)	gansal
219. official	tungkulanin
220. one hundred thousand . .	yuta
221. organization	katatagan
222. organ	tatag
223. orientation	satungo
224. orthography	palatitikan
225. out of the regular	liwas
226. outstanding	katangi-tangi
227. park	liwasan
228. parliament	batasan
229. part	hati, bahagi
230. particle	tipik
231. patent	karapatang-tuklas
232. permission	tulot
233. philosophy	batnayan
234. physics	sugnayan
235. pierce	tuhog
236. place	lunan
237. population	santauhan
238. positive	tahas
239. practice	sanay
240. press release	ngalandakan
241. process	saayos
242. profession	panungkulan
243. professor	dalubguro
244. programme	talatuntunan
245. progress	unlad
246. proper	tumpak, angkop
247. prosody	palabigkasan
248. prosperity	kaniguhan
249. psychology	dalub-isipan
250. publication	lathalain
251. radio	diglap
252. real	tunay
253. receipt	dawat
254. record	tala

255. reduction	maliw
256. referendum	pagtutukoy
257. region	danay (Bis.)
258. related	kaugnay
259. religion	agamahan (Mar.)
260. remainder	labi
261. report	ulat
262. repository	simpanan
263. repulsion	sikway (Hlg.)
264. result	bunga, kinalabasan
265. retail	tingi
266. return	balik
267. review	balik-aral
268. revision	mulinyos
269. revolution (Mech.)	ikit
270. revolve	ligid
271. rotation	inog
272. rural	pangkabukiran, kabukiran
273. scholar	paaral
274. science	agham
275. science museum	tanyagang agham
276. score	lubig
277. seedling	binhi
278. sediment	tining
279. semester	hatintaon
280. seminar	binhisipan
281. Senior (Sr.)	Ama (Am.)
282. sense	dandang
283. shape	hugis
284. sign	tanda
285. similarity	hawig
286. small things	mikmik
287. social sciences	ulnayan
288. society (in general)	ulnong (Ilk.)
289. solid	siksin
290. solve (a problem)	lutas
291. source	mula
292. sowing	hasik
293. special	tangi
294. speed	bilis
295. sports	sanlaruan
296. spread	latag

297. square	parisukat
298. star	tala
299. steel	paslip (lik.)
300. stoppage	tigil
301. straight	tuwid
302. student	mag-aaral
303. subconscious mind	kubmalay
304. substance	sangkap
305. summary	buod
306. surface	dayag
307. surname	alangkan
308. switch	kabtol
309. syntax	palaugnayan
310. system	kaayusan
311. table of contents	talalamanan
312. tactics	paagi (Bis.)
313. technical	aghimuin
314. technology	aghimuan
315. telephone	hatinig
316. television	tanlap
317. term	tawag
318. term paper	sultaning
319. thermometer	initsukat
320. thermostat	initsupil
321. thesis	tikha
322. thought	isipin
323. thrust	sikad
324. time	takna (Bis.)
325. tone	linig
326. top	tuktok
327. track	tunton
328. training	pasanayan
329. treasurer	ingatyaman
330. trunk	puho
331. trustee	katiwala
332. typewriter	limbitan
333. typewriting paper	papel-limbitan
334. typist	manlilimbit
335. university	pamantasan
336. unnatural	dilikas
337. unravel	nisnis
338. urban	pantunsod
339. vapor	singaw

340. velocity	tulin
341. vice-president	puli-pangulo
342. vocabulary	talasalitaan
343. vocational	hanapbuhayin
344. voice	tinig
345. volume	buok
346. voluntary	kusa
347. vote (in an election)	halal
348. whole	buo
349. world	daligdig
350. writings	panulatan

B. PALATANGKASAN (Theory of Sets)

351. addition property	kaangkinang paragdag
352. additive inverse	dagdagang kabaligtaran
353. algebra of sets	panandaan ng tangkas
354. and so on (...)	at pagayon (...)
355. any set	anumang tangkas
356. A prime (A')	A kudlit
357. a set	isang tangkas
358. associative	ugnayin
359. associative law	ugnaying batas
360. associativity	pagkaugnayin
361. belongs to	ay nauukol sa
362. can be placed into one-to-one correspondence	maisusungkad (maisasatu-gon nang isa-sa-isa)
363. closure property	kaangkinang pinid
364. collection	katipunan
365. commutative	palitin
366. commutativity	pagkapalitin
367. commutative law	paliting batas
368. complement of a set	kapuno ng isang tangkas
369. coset	katangkas
370. definite set	tangkas na turing
371. countable	mabibilang
372. derived set	hangong tangkas
373. diagram	guhitin
374. difference of sets	kaibhan ng tangkas
375. disjoint sets	diugnay na tangkas
376. distributive	bahagihin

377. distributivity	pagkabahagihin
378. domain	saklaw
379. element	mulhagi (mulaang bahagi)
380. element of a set	mulhagi ng isang tangkas
381. empty (null) set	walang-lamang tangkas
382. equal to	tumbas sa
383. equivalence	pagkakahalga
384. equivalent	kahalga
385. equivalent set	kahalgang tangkas
386. equivalent sets	mga kahalgang tangkas, magkakahaigang tangkas
387. false statement	di-tunay na saad
388. finite set	hangganing tangkas
389. finite number of elements	hangganing bilang ng mga mulhagi
390. given a set A	ibinigay ang tangkas A
391. greater than	higit sa
392. Hausdorff space	walaying talangkas
393. hence	kaya nga
394. identical elements	mga kasiyangang mulhagi
395. identity element	kasiyangang mulhagi
396. if and only if (iff)	kung at kung lamang (kkl)
397. improper subset	di-angkop na kubtangkas
398. indefinite set	tangkas na dituring
399. inequality	dikatumbasan
400. infinite set	awanganintangkas
401. infinite number of elements	awanganing bilang ng mga mulhagi
402. intersection	bagtas
403. intersection of two sets	bagtas ng dalawang tang- kas
404. inverse element	kabaligtarang mulhagi
405. inverse operation	baligtaring sakilos
406. is a subset of	ay kubtangkas ng
407. is equivalent to (set)	ay kahalga ng (tangkas)
408. less than	kubos sa
409. member	kabilang
410. member of a set	kabilang ng isang tangkas
411. metric space	sukating talangkas
412. multiplication property	kaangkinang parami
413. multiplicative inverse	paramihing kabaligtaran
414. not equal to	di-tumbas sa
415. not less than	dikubos sa

416. number line	guhitbilang
417. one-to-one correspondence	sungkad (Mat. Tag.)
418. open phrase	bukas na parirala
419. open sentence	bukas na pangungusap
420. operation	sakilos
421. operation on sets	mga sakilos sa mga tangkas
422. operator	pakilos
423. ordered pair	kapid na ayos
424. pair	kapid (Bis.)
425. permissible values	maaaring halga
426. proper subset	angkop na kubtangkas
427. property	kaangkinan
428. range	abot
429. reflexive property	kaangkinang pabalik
430. reflexivity	pagkapabalik
431. replacement set	pamalit na tangkas
432. roster (tabulation) method	pamamaraang panaalatag
433. rule (defining property) method	pamamaraang paturing tangkas
434. set	tangkasan ng tangkas
435. set equality	katumbasan ng tangkas
436. set notation	halat ng tangkas
437. set of numbers	tangkasan ng mga bilang
438. set of positive integers	tangkasan ng mga tahas na buumbilang
439. shade the circle	liliman ang bilog
440. solution set	tangkasan ng kalutasan
441. statement	saad
442. subset	kubtangkas
443. superset	higtangkasan
444. symbol	sagisag
445. symmetric property	kaangkinang parianyuin
446. the entire (whole) set	ang buong tangkas
447. the set	ang tangkas
448. topological set	lunaning talangkasan
449. totality	sangkabuuhan
450. transitive property	kaangkinang palipat
451. transitivity	pagkapalipat
452. true statement	tunay na saad
453. truth set	tangkasan ng katutuhanan

454. union of two sets	kaisahan ng dalawang tangkas
455. unit set	isahing tangkas
456. universal set	lahatang tangkas
457. variable	aligin
458. Venn diagram	guhiting Venn
459. well-defined set	ganap-turing na tangkas

K. BILNURAN (Arithmetic)

460. absolute value	halgang wagas
461. abstract number	bilang na basal
462. add	magdagdag
463. addend	panagdag
464. addition	palaragdagan
465. arithmetic	bilnuran (bilang + sunu- ran)
466. augend	dagdagin
467. base	takad
468. binomial	duhakay
469. cardinal number	bilang na paulat
470. carry	dalhin
471. "carry five"	"dala lima"
472. classification of numbers	palaurian ng mga bilang
473. clock arithmetic	bilnurang taknain
474. closure	kapiniran
475. complex fraction	hugnaying hatimbilang
476. composite number	bilang na pinaglakip
477. compound fraction	langkaping hatimbilang
478. consecutive integer	kasunod na buumbilang
479. counting numbers	bilang na panalatag
480. cross multiplication	laktawang palaramihan
481. cross products	mga laktawang bunga
482. decade (ten of any- thing)	sinampu
483. decade (ten years)	pultaon
484. decimal fraction	sampung hatimbilang
485. decimal	sampuan
486. decimal point	tuldok-sampuan
487. decimal system	panampuan
488. deduct	awasin

489. denominator	pamahagi
490. difference	kaibhan
491. digit	tambilang
492. divide	maghati
493. divided by	hatiin sa
494. dividend	hatiin
495. divisible	mahahati
496. divisibility	pagkahatiin
497. division	palahatian
498. divisor	pahati
499. double	dinalawa
500. enumerate	sabilangin
501. expanded form	pinaraming anyo
502. exponent	paulit
503. factor	kabuo
504. four fundamental operations	apat na batayang sakilos
505. fraction	hatimbilang
506. function	kabisa
507. Hindu-Arabic numbers	pamilang na Hindu-Arabe
508. improper fraction	diangkop na hatimbilang
509. integer	buumbilang
510. irrational number	bilang na ditagwayin
511. least common denomi- nator (LCD)	pinakamaliit na lahatang pamahagi (PLP)
512. least common multiple (LCM)	pinakamaliit na lahatang kaparami (PLK)
513. line segment	putol na guhit
514. lowest term	pinakamababang takay
515. mean	tamtaman
516. measurement	sukat
517. minuend	bawasin
518. minus	bawas
519. mixed fraction	haluang hatimbilang
520. monomial	isakay (isang takay)
521. multiple (adj.)	dinami, maramihan
522. multiple (n.)	kaparami
523. multinomial	maramikay
524. multiplicand	damihin
525. multiplication	palaramihan
526. multiplication table	talay ng palaramihan
527. multiplier	parami
528. multiply	magparami

529. natural number	bilang na likas
530. negative sign	tandang baling
531. number	bilang
532. numbering	kabilangan, pagbibilang
533. numeral	pambilang
534. numerology	palabilangan
535. numerator	panakda
536. one half	kalahati
537. order	panunuran
538. ordinal number	bilang na panunod
539. percent	bahagdan
540. plus	dagdag
541. polynomial form	damikaying anyo
542. point (.)	tuldok
543. positive sign	tandang tahas
544. power	lambal
545. problem	lutasin
546. proper fraction	angkop na hatimbilang
547. proportion	hagway (Mat. Tag.)
548. quantity to be found	hanapin
549. quotient	kahatian
550. ratio	tagway (Mat. Tag.)
551. rational number	bilang na tagwayin
552. reciprocal	kabaligtad
553. remainder theorem	hunain ng labi
554. Roman numerals	pamilang Romano
555. rounding off	pagbilog
556. short cut	laktod (Hig.)
557. sign	tanda, pananda
558. similar fractions	hawig na hatimbilang
559. simplest form or term	pinakapayak na takay
560. simplify (v.)	payakin
561. single	inisa
562. solvable	malulutas
563. subtract	magbawas
564. subtraction	palabawasan
565. subtrahend	pamawas
566. sum	dagup (lik.)
567. term	takay
568. therefore	kung gayon
569. times	(x) maka
570. total	kabuuan
571. transpose (v.)	ilipat

572. transposition (n.)	salipat
573. trinomial	talukay
574. unique	nag-iisa
575. unknown	di-alam
576. zero	awan, sero
577. zero exponent	awan na paulit

D. SUKGISAN (Geometry)

578. acute angle	sihang kipot
579. adjacent angles	sihang tabi
580. adjacent sides	magkatabing gilid
581. alternate angles	sihang salisi
582. altitude	tayog
583. analytic geometry	suriing sukgisan
584. angle	siha
585. axiom	batlain (batayan na simu- lain)
586. base angle	sihang takaran
587. broken line	guhit na bali-bali
588. bulk	bikil (Mat. Tag.)
589. centi—	senti—
590. chord	bagting
591. coincident	magkatuntong, katuntong
592. collinear	magkaguhit, kaguhit
593. complementary angle	sihang kapuno
594. conclusion	pasyahin
595. confirmation	patutoo
596. congruent	magkalapat, kalapat
597. construct a figure	gumuhit ng isang laraw
598. construction	pagguhit
599. corollary	hugpungin
600. cube (solid Geo.)	binuok
601. cube (the third power)	talurami
602. diagonal	hilis
603. decagon	pulsiha
604. decahedron	puldayag
605. deci—	desi—
606. degree	antas
607. disc	dalipay (Mat. Tag.)
608. draw a line	gumuhit
609. ellipse	duyog (Mat. Tag.)

610. end point	dulong tuldok
611. equiangular	parisiha
612. equilateral (adj.)	parigilid
613. evolute	balisultag
614. foot	talampakan
615. frame	bastagan
616. French curve	kiluang galod
617. fundamental principle	batayang simulain
618. geometrical interpretation	sukgising pakahulugan
619. geometry	sukgisan (sukat + hugis + —an)
620. globe	hilihid (Mat. Tag.)
621. helix	pilipit
622. hemisphere	hatimbulog
623. heptagon	pitsiha
624. hypotenuse	gilis (gilid na hilis)
625. hexagon	nimsiha
626. hexahedron	nimdayag
627. hypothesis	palagayin
628. inch	dali
629. included angle	sihang ipit
630. involute	sultag (sulong + latag)
631. isolated point	bukod na tuldok
632. length	haba
633. length of a segment	haba ng putol
634. meter	metro
635. midpoint	gituldok
636. mid-section	gitapyas
637. milli—	mili—
638. nonagon	samsiha
639. oblique	talibas
640. oblique angle	sihang talibas
641. obtuse angle	sihang bika
642. octagon	walsiha
643. one dimensional figure	laraw na iisahing sukod
644. opposite angle	sihang tapat
645. oval	habilog (habang bilog)
646. parallel	agapay
647. parallel lines	mga guhit na agapay
648. parallelogram	parigapay
649. parallel sections	mga tapas na agapay
650. perimeter	gikop (gilid + salikop)

651. pentahedron	limdayag
652. pentagon	limsiha
653. perpendicular	tadlong
654. perspective (3-dimensional effect)	sawang (Mat. Tag.)
655. plane geometry	lapyang sukgisan
656. principle	simulain
657. proof	patunay
658. protractor	paniha
659. point—slope form	tuldok-hilig na anyo
660. postulate	batayang palagay
661. premise	kahunaan
662. prism	balimbing
663. prolongation of a line	padayon ng guhit
664. polygon	damsiha
665. polyhedron	damdayag (dami + dayag)
666. pyramid	tagilo
667. quadrilateral	patgilid
668. radius	lihit
669. ray	sinag
670. rectangle	paritadlong
671. representation of a point	talihalat ng tuldok
672. right angle	sihang tadlong
673. rhomboid	tagihilis
674. rhombus	tagisukat
675. scale (of degrees)	talaantasan
676. secant (Geometry)	tangab (Mat. Tag.)
677. section	tapyas
678. segment	putol
679. segment (of a circle)	liha (liha ng isang bilog)
680. semicircumference	hatintikop
681. shape	hugis
682. slope	hilig
683. solid geometry	siksing sukgisan
684. spherical	timbulugin
685. spherical geometry	timbuluging sukgisan
686. spiral	balukay
687. square	parisukat
688. straight angle	sihang ladiad
689. subsurface	kubdayag
690. supplementary angle . . .	sihang kaladiad
691. surface	dayag

692. surface (as contrasted to the reverse side)	karayagan
693. tangent (line)	dikit
694. theorem	hunain
695. theory	huna
696. tetrahedron	patdayag
697. T-square	paripang galod
698. trapezoid	tagigapay (tagibang + agapay)
699. truncated	tinapyas
700. two-dimensional figure	laraw na dadalawahing sukod
701. vertex angle	siha ng bagtasan
702. vertex of an angle	bagtasan ng siha
703. vertical axis	tayong taluhog
704. width	lapad
705. yard	yarda

E. PANANDAAN (Algebra)

706. abscissa	higawat (higa + agwat)
707. a-cubed	a-binuok
708. algebra	panandaan (pa- + tanda + an)
709. algebraic expression	panandaang pahayag
710. a-squared	a-dinawak
711. a posteriori probability	masiraning kalagmitan
712. a priori probability	matwiraning kalagmitan
713. a to the fourth power	a sa ikaapat na lambal
714. braces	mga pamukod
715. brackets	mga panalikop
716. cartesian coordinates	mga Dekarthing katayuwat
717. cartesian coordinate system	kaayusang katayuwat, Dekarthing tayuwatan
718. coefficient	katuwang
719. column	tudling
720. combination	palakipan
721. completing the square	pagbubuo ng parirami
722. complex variable	hugnayang aligin
723. compound events	mga langkaping pangyayari
724. conditional equation	pinasubaliang tumbasan

725. conditional probability	pinasubaliang kalagmitan
726. constant (adj.)	lagian
727. constant (n.)	lagin
728. constant quantity	lagiang dami
729. coordinate system	kaayusang katayuwat
730. coordinates	mga katayuwat
731. cube (the 3rd power)	talurami
732. cube root	talugat
733. degree of a term	antas ng isang takay
734. denominator determinant	pamahaging taliyak
735. dependent variable	disariniling aligin
736. determinant	taliyak
737. difference of two cubes	kaibhan ng dalawang talurami
738. difference of like powers	kaibhan ng magkatulad na lambal
739. difference of two squares	kaibhan ng dalawang parirami
740. discriminant	talangi (mula sa tangi)
741. distinct root	magkaibang ugat
742. double root	dahwahang ugat
743. equation	tumbasan
744. evolution	hiugat
745. expansion of the determinant	buklad ng taliyak
746. exponential equation	pauliting tumbasan
747. exponential function	pauliting kabisa
748. extraction of root	pahugot sa ugat
749. factor (v.)	bungkagin
750. factored form	binungkag na anyo
751. geometrical progression	sukgising panisulong
752. graph	talanguhit
753. graphical solution	talanguhiting kalutasan
754. horizontal axis	higang taluhog
755. identical equation	mga kasiyang tumbasan
756. imaginary number	gunimbilang
757. independent events	mga sarilining pangyayari
758. independent variable	sarilining aligin
759. index of a radical	kaugatan
760. involution	palambal
761. like signs	magkatulad na tanda
762. linear equation	tuwiring tumbasan

763. linear function	tuwiring kabisa
764. mutually exclusive events	mga tambinging dilangka- ping pangyayari
765. non-occurrence of an event	dipagkatupad ng isang pangyayari
766. non-repeating decimal	sampung diulitin
767. numerator determinant	panakdang taliyak
768. occurrence of an event	pagkatupad ng isang pangyayari
769. ordinate	layuwat (tayo + agwat)
770. parenthesis ()	panaklong
771. permutation	pamalitan
772. perfect square	himpil na parirami
773. plot (n.)	tunton
774. plot (v.)	tuntunan
775. point	tuldok
776. probability	kalagmitan (Bis.)
777. quadratic equation	dawaking tumbasan
778. quartic equation	apating tumbasan
779. radical	pang-ugat
780. radical sign (notation) .	tandang pang-ugat
781. radicand	ugatin
782. range of function	abot ng isang kabisa
783. rectangular coordinates	mga paritadlunging kata- yuwat
784. rectangular coordinate system	paritadlunging kaayusang katayuwat
785. repeating (periodic) decimal	sampung ulitin
786. row	hanay
787. rule of signs	panuto ng mga tanda
788. series (Math.)	dalayray (dayday) (Bis.)
789. similar quantities	mga hawig na dami
790. simple root	payak na ugat
791. simultaneous equations	magkakalutas na tumba- san
792. square (the 2nd power)	parirami
793. substitute	hulip
794. substitution	paghuhulip
795. synthetic division	daglating paghahati
796. table of powers and roots	talay ng mga lambal at ugat
797. terminating decimal	sampung maytakda

798. to satisfy an equation	lapatan ang isang tumbasan
799. transcendental function	igpawing kabisa
800. unlike signs	dimagkatulad na tanda
801. variable quantity	aligang dami
802. vinculum	saklungguhit
803. x-axis	taluhog-x
804. x-ordinate	tayuwat-x
805. y-axis	taluhog-y
806. y-ordinate	tayuwat-y

G. TATSIHAAN (Trigonometry)

807. addition formula	palaragdaging sanyo
808. amount of rotation	daghan ng inog
809. angle of depression	siha ng hiligbaba
810. angle of inclination . . .	siha ng hiligtaas
811. antilogarithm	gantilogpaulit
812. Briggsian logarithm	Brigsing logpaulit
813. characteristic (of log)	buumbahagi (ng logpaulit)
814. circular function	biluging kabisa
815. clockwise rotation	pataknaang inog
816. co-function	ka-kabisa
817. common logarithm	karaniwang logpaulit
818. computation by logarithm	pagtutuos sagitan ng logpaulit
819. cosecant, cosec	kasekway
820. cosine, cos	kasinway
821. cosine law	kasinwaying batas
822. counter clockwise rotation	baliktaknaang inog
823. directed angle	sihang itinungo
824. extrapolate	iduklay
825. first quadrant	unang kapatan
826. fourth quadrant	ikaapat na kapatan
827. initial side (of an angle)	pamulang gilid (ng isang siha)
828. interpolate	isalingit
829. inverse trigonometric function	baligtad na tatsihaning kabisa
830. logarithmic function . . .	logpauliting kabisa
831. logarithm	logpaulit

832. logarithmic	logpaulitin
833. mantissa (of log)	sampuambahagi (ng log-paulit)
834. minute of time	sandali
835. minute of arc	sanli ng bantok
836. natural function	likas na kabisa
837. natural logarithm	likas na logpaulit
838. napier's analogies	mga sawangki ni Napier
839. Napierian logarithm	Napiering logpaulit
840. origin	mulaan
841. plane trigonometry	lapyang tatsihaan
842. quadrant	kapatan
843. radian	radyan
844. radian measure	radyang sukat
845. radius vector	tuganong lihit
846. reciprocal function	kabaligtarang kabisa
847. reduction formula	sanyong pangmaliw
848. rotation	inog
849. scale (of degrees)	talaantasan
850. secant, sec.	sekway (sek + tagway)
851. second of time	saglit
852. second of arc	sagli ng bantok
853. second quadrant	ikalawang kapatan
854. simplification formula	sanyong pamayak
855. sine curve	sinwaying kilo
856. sine law	sinwaying batas
857. sine, sin.	sinway (sin + tagway)
858. sine wave	sinwaying alon
859. sinusoidal	sinwayin
860. solution of right triangle	kalutasan ng tatsihang tadtlong
861. spherical trigonometry	timbuluging tatsihaan
862. table of logarithm	talay ng logpaulit
863. tangent, tan	tanway (tan + tagway)
864. terminal side (of an angle)	pahuling gilid (ng isang siha)
865. third quadrant	ikatlong kapatan
866. triangle	tatsiha
867. trigonometric form	anyong tatsihanin
868. trigonometric equation	tatsihaning tumbasan
869. trigonometric function	tatsihaning kabisa
870. trigonometric identity	tatsihaning kasiyangan

871. trigonometry	tatsihaan (tatlo + siha + -an)
872. unit of an angle	isahin ng siha
873. unit circle	isahing bilog
874. vector	tugano (tungo + gaano)
875. wave	alon

H. TAYAHAN (Calculus)

876. approximate (adj.)	madapit
877. approximate (v.)	padapitin
878. approximation	dapit
879. area under a curve	dawak sa ilalim ng isang kilo
880. calculus	tayahan (taya + -han)
881. chain rule	patanikalang panuto
882. comparison test	hambingng subok
883. continuity	katuluyan
884. converge	maglapit
885. convergent	palapit
886. constant rate	laging kabilsan
887. curvature	kakiluan
888. derivative with respect to x	hango tungod x
889. derivative of a function	hango ng isang kabisa
890. differential equation	tingiring tumbasan
891. differential notation	tingiring halat
892. differential sign	tingiring tanda
893. differentiable	matitingid
894. differentiate (v.)	tingirin
895. differential (adj.)	tingirin
896. differential (n.)	tingid (Mat. Tag., pag-iba)
897. differential calculus	tingiring tayahan
898. differentiation	pagtingid
899. diverse	maglayo
900. divergent	palayo
901. divergent series	palayong dalayray
902. domain of a function	saklaw ng isang kabisa
903. element of sequence	kadatig (kasamang datig), mulhagi ng datig
904. expansion	buklad
905. explicit function	lantad na kabisa

906. increment	dugang (Bis.)
907. infinite series	awanganing dalayray
908. implicit function	hiwatig na kabisa
909. instantaneous	iglapin
910. instantaneous value . . .	iglaping halga
911. integrable	malalagom
912. integral (adj.)	lagumin
913. integral (n.) calculus	laguming tayahan
914. integration	paglagom
915. iteration	pagliwan
916. limit of a sequence	hanggan ng isang datig
917. mean value theorem	hunain ng tamtaming halga
918. parametric	sadyansukatin
919. quaternion	pamapat
920. quaternions	pamapatan
921. range of a function	abot ng isang kabisa
922. relative (adj.)	matugnay (matugon + maugnay)
923. related rates	magkatugnay na kabilsan
924. relativity	katugnayan
925. rate of change	kabilsan ng baylo
926. rate of increase	kabilsan ng pagdaragdag
927. scalar	bilangin
928. sequence	datig
929. sequence of partial sums	datig ng mga bahaging dagup
930. set of marks	tangkas ng mga gurlit
931. situs	lunan
932. successions of approxi- mations	sunuran ng mga dapit
933. tensor	katuganhan
934. trapezoidal rule	tagigapaying panuto
935. variable rate	aligang kabilsan

I. PALAULATAN (Statistics)

936. aggregative	malapiin
937. array	tugday (Bis.)
938. assumed mean	ipinalalagay na tamtaman
939. base year	takad na taon, taong takad
940. census	lahatambalang, sensus

941. class interval	patlang ng uri
942. confidence level	kapantayan ng tiwala
943. class limit	hanggan ng uri
944. correlation	satugnay (satugon + ugnay)
945. covariance	kaalig
946. datum, data	malak
947. decile	kasampuan
948. deductive statistics	palaulatang pasaklaw
949. discrete data	hiwalay na malak
950. dispersion	kakalatan
951. deviation	kaliwasan, liwas
952. empirical data	masiring malak
953. factorial	buuin
954. histogram	taladalasan
955. index	panuro
956. index number	bilnuro (bilang + turo)
957. inductive statistics	palaulatang pabuod
958. kurtosis	umbok
959. least squares	kababaang parirami
960. mean	tamtaman
961. mean value	tamtaming halga
962. measure of central tendency	sukat ng pagitnang tungu- hin
963. median	gitnaan
964. midpoint, mid-mark, mid-x	gituldok, gitguhit, git-x
965. mode	palasak
966. moment	sigwat (isig + agwat)
967. norm (standard model)	daniw (pamantayan, uli- ran)
968. normal (ord.)	karaniwan
969. normal (tech.)	daniwin
970. ogive	hatimbuok
971. open-end distribution	bukas-dulong pamamahagi
972. percentile	kabahagdan
973. population (of things in general)	sambagayan
974. primary source	pangunahing batis
975. probability	kalagmitan (Bls.)
976. quartile	kapatin
977. quantile	karamuin
978. questionnaire	talatanungan

979. random	alisaga
980. random choice	alisagang pill
981. random sample	alisagang halimbagay
982. random sampling	alisagang paghihalimbagay
983. registration	satala
984. sample	halimbagay (halimbawang bagay)
985. sampling	paghihalimbagay
986. schedule	palatanungan
987. secondary source	pangalwahing batis
988. secular trend	matagalang tunguhin
989. significance	katuturan
990. skewness	pagkekiwal
991. statistic (measure of a sample)	halinsukat (halimbagay + sukat)
992. systematic sample	maayusing halimbagay
993. systematic sampling	maayusing paghihalimbagay
994. tabulate (v.)	talayin, italay
995. tabulation (n.)	talahanayan, talayan
996. variance	alig
997. variate	paalig
998. weighted arithmetic mean	binigatang binunuing tam-taman
999. x-array	tugday-x
1000. y-array	tugday-y